# CONTENTS

**SECTION** **Page**

**SPILL PREVENTION, CONTROL, AND COUNTERMEASURES**
**BEST MANAGEMENT PLAN**

**N O A A**

**NATIONAL WEATHER SERVICE**
**National Weather Service RDA Facility**
**Alkali Creek Road**
**Yellowstone County, Montana**

Designated Person Responsible for Spill Prevention (DRO):

Printed Name: Keith Meier - MIC

Signature: _____

Date: _____

Phone: (406) 652-0851

The Regional Environmental Compliance Officer (RECO) has reviewed the facility and determined that an SPCC Plan is not required per 40 CFR 112. This Plan is developed strictly as a Best Management Plan. The determination is based on :

___X___ The facility does not exceed capacity.

_____ The facility meets capacity requirements but, a discharge will not reach navigable waterways.

RECO Printed Name: Thanh Minh Trinh, P. E.
Phone: (206) 526-6647

RECO Signature: _____

Date: _____

## PART I - GENERAL INFORMATION

### A. GENERAL

This section of the Best Management Practices plan provides general information about the facility.

**1. Name:**
National Weather Service Forecast Office (WFO)

**2. Date of Initial Operation**:

1995— Interior Fuel Tanks Installed In Generator Shelter

**3. Location**

National Weather Service RDA Site
Street: Alkali Creek Road in Yellowstone County
City: 5 - miles North of Billings
State/Zip: Montana 59102
Latitude: 45° - 51'- 14" North
Longitude: 108 °- 36'- 24" West
Elevation: 3598 ft. MSL

**4. Name and phone number of Owner (POC)**

National Weather Service Forecast Office
2170 Overland Avenue
Billings, Montana 59102
Phone: (406) 652-0851

**5. Facility Contacts (Environmental coordinator, Area Safety Representative, Alternate, Focal Point, First Responder)**

| Name | Title | Telephone Number |
|---|---|---|
| Tony Browder | Envir. Focal Point | (406) 652-0851 |
| Keith Meier | MIC | (406) 652-0851 |

## B. SITE DESCRIPTION AND OPERATIONS

This section describes the site and its operations.

### 1. Facility Location, Layout, and Operations

The facility is located 2-miles east of Montana State Highway 3, 900' south of Alkali Creek Road in Yellowstone County, Montana.(Appendix J - Figure 1). The site consists of a parcel of ground 210' x 210'. The site is in an open field and the ground is flat. The land is owned by the State of Montana Department of Lands and is provided to the NWS on "Land Use Licence". All improvements on the site are owned by the NWS. Access to the site is by wheeled vehicle with 2-miles of improved-graveled road. Improvements on the property include a 15 meter tower with radome and radar antenna mounted on the top; an Equipment Building; an Uninterrupted Power Building and a Generator Building all enclosed by an 8' high chain-link fence.

### 2. Fuel Usage

The AST is normally filled when it becomes about one-third empty. This amount is approximately 250 gallons. The generator is run once each week for about one-half hour for maintenance and testing purposes. The average fuel consumption of the generator is approximately 4 gallons per hour. The 80 kw generator is automatically started if the commercial power is interrupted and will continue to run until the commercial power is restored and stabilized. Under normal conditions, the tank is filled about once each year.

### 3. Fuel Storage

Two 240 gallon, interconnected, steel day tanks are installed in the Generator Shelter to supply diesel fuel to an emergency generator. The Generator Shelter has sufficient spill containment capacity to provide secondary containment to handle all of the oil in the day tanks.

### 4. Piping

Piping for the RDA tanks are all located in the building, above the tanks, and are fully accessible for inspection and maintenance.

### 5. Spill Risks (Appendix J - Figures 1 & 2)

The generator and associated fuel tanks are installed in the RDA site Generator Shelter. This shelter is constructed to provide secondary containment for all fuel stored in these tanks. The site around the Generator Shelter is flat and the soil is porous. In the event that any fuel should leak from the shelter of if there should be a spill from the delivery truck, the oil will be absorbed into the soil and can be clean up in an appropriate manner. The chances of any fuel reaching navigable waters is extremely small.

## 6. Chemical Storage Locations

In addition to the diesel fuel used for the emergency power generator, this facility also stores chemicals ( e.g., oils, paint, solvents, antifreeze, cleaning compounds and pesticides) for the operation, maintenance and testing of station facilities and equipment. These are stored/used in the following location(s):

**Location : (Example: Flammable locker in Station Storage Room)**

a. Unused oil — Stored in original containers in the Generator Shelter.
b. Paint in spray cans — Stored in Flammable Locker in the WFO Stores Room.
c. Station Cleaning Supplies — Stored in the UPS Shelter.
d. Lubricants in spray cans -- Stored in Generator Shelter.
e. Pesticides — Not stored onsite.
f. New Batteries — Stored in the WFO Stores Room in the original containers.
g. Used Batteries — Stored in recycling container in the WFO Stores Room.
h. New Fluorescent Light tubes — Not Stored; Purchased as needed.
i. Used Fluorescent Light tubes — Stored in recycling shipping box in the WFO Stores Room.

## 7. Permits Required (Copies Attached in Appendix H)

- Permits Not required

## Part II - OPERATIONAL PROCEDURES FOR SPILL PREVENTION

**A. Tank Refueling Operations.** This section discusses the procedures that shall be used during unloading of fuel from the tank truck into the AST to prevent spills. This procedure shall be documented every time refueling occurs using the form found in Appendix A. Copies of this form shall be kept for five (5) years.

**1.** The following procedure shall be used **before** fuel unloading: (APPENDIX A)

a. The Facility Manager or his designated representative should determine the available capacity (ullage) of the AST by converting the reading on the fuel gauge to gallons (See Appendix A). This ullage is communicated to the fuel supply contractor and marked in the fueling log.

b. Move spill containment equipment such as booms, spill barriers or spill kits into the unloading area.

c. Block the tank truck wheels.

d. Place drip pans under all pump hose fittings (if applicable) before unloading.

e. The Facility Manager or his designated representative and the delivery driver ensure the fill nozzle is placed in the appropriate AST appurtenance.

**2.** The following procedure shall be used **during** the fuel unloading period:

a.. The Facility Manager or his designated representative and the delivery driver shall remain with or near the vehicle and the fuel tanks at all times during unloading. Gauges on the AST and the truck, as well as the fueling nozzle, shall be continuously monitored to ensure the ullage is not exceeded. If the audible high-level alarm sounds, stop the unloading procedure immediately to ensure fuel lage is not exceeded.

**3.** The following procedure shall be used **after** fuel unloading is completed: (APPENDIX A)

a. Record the amount of fuel transferred to the AST in the log (Appendix A).

b. Drain the fill hose and then ensure that all drain valves are closed (if applicable) before removal of the hose from the tank

c. Pour any uncontaminated fuel in the drip pans, tank truck containment pool, or spill pipe spill bucket container into the AST (if it has the capacity) or dispose of appropriately.

d. Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the tank.

e. Remove the blocks from truck wheels.

f. Place a copy of the fuel-unloading checklist in the SPCC BMP.

## PART III - SPILL COUNTERMEASURES AND REPORTING

### A. SPILL COUNTERMEASURES

This section presents countermeasures to contain, clean up, and mitigate the effects of any oil spills at this site.

A spill containment and cleanup activity will never take precedence over the safety of personnel. No countermeasures will be undertaken until conditions are safe for workers. The **SWIMS** procedure should be implemented as countermeasures:

**S** - Stop the leak and eliminate ignition sources.

a. Attempt to seal or some how stop leak if it can be done safely.

b. Attempt to divert flow away from any drainage ditch, storm sewer or sanitary sewer with a spill barrier or the contents of spill kit. The spill kit is located in the Generator Building.

c. Eliminate all ignition sources in the immediate area.

**W** - Warn others.

a. Yell out "SPILL". Inform the person in-charge at your facility.

b. Account for all personnel and ensure their safety.

c. Notify contacts and emergency response contractor as described in the following section for assistance in control and cleanup.

**I** - Isolate the area.

a. Rope off the area

**M** - Minimize your exposure to the spilled material by use of appropriate clothing and protective equipment. If possible, remain upwind of the spilled material.

**S** - Standby to assist the emergency response contractor.

## B. SPILL REPORTING (APPENDIX C):

1. General Notification Procedures For All Spills:

Within 24 hours, the responsible person or designee (on this plan title page or in Part 1, A.5.) is directly charged with reporting **all** oil spills that result from facility operations as follows:

a. In the event of an emergency (e.g., fire, or injury), call **911**.

b. Notify the appropriate persons within your WFO, Regional Office and line office:

**National Weather Service:**

**Mike Jacob, NWS Environmental Compliance Officer (NWSH)**

**Phone number**: **(301) 713-1838 Ext. 165, Jmichael.Jacob@NOAA.GOV**

**Olga Kebis, NWS Safety Officer (NWSH)**

**Phone number: (301) 713-1838 Ext. 173, Olga.Kebis@NOAA.GOV**

**Robert Kinsinger, Regional Environmental Compliance Coordinator (ECC) in Western Region Headquarters**

**Phone number: (801) 524-5138 Ext. 223 Email: robert.kinsinger@noaa.gov**

c. **NOAA Environmental Compliance and Safety Office Program:** E-mail or call your **RECO**.

***WASC*** Thanh.M.Trinh@NOAA.GOV Phone: (206) 526-6647

d. **LECO – City of Billings Fire Department**

**Phone: 911**

**Note**: **LECO & RECO** must determine if Federal or State notification is required and follow up accordingly. (The State of Montana requires notification when a release of petroleum products, into the soil, exceeds 25-gallons **OR** If spilled into the waters of the state, any quantity that would produce a visible oil slick, oil solids, or coat aquatic life, habitat, or property with oil.)

**Montana State Disaster and Emergency Services Division (DES)**

**Phone: (406) 841-3911**

### 2. Cleanup Contractor Notification

An emergency response contractor should also be notified to assist with the clean up if necessary. **NWS/WFO at Billings** has identified and contacted the following contractors that are available for an emergency response:

| Contractor(s) | Phone Number |
|---|---|
| • The RETEC Group, Inc.<br>2048 Overland Ave. #101<br>Billings, MT 59102 | (406) 652-7481 |
| • Olympus Technical Services, Inc.<br>454 Moore Lane<br>Billings, MT 59102 | (406) 254-3554 |

### 3. Spill Report

Complete a spill report using the format provided in APPENDIX C. Send this to your RECO with a copy to the Western Region ECC.

## C. Training

The Environmental/Safety Focal Point and an alternate should be trained in 1)the refueling procedures, 2)countermeasures, and 3)spill reporting. The alternate should be designated in case the primary person is off site at the time of a spill.

(See APPENDIX D for Training Outline and Training Record form)

## D. Personal Protective Equipment (PPE)

- PPE information is specified in the **MSDS**
- Eye protection is accomplished by the use of **Chemical Goggles**
- Hand protection is accomplished by the use of **Nitril Gloves**
- Other clothing & equipment - if contaminated, must be removed and laundered before reuse. Items which cannot be laundered should be discarded.
- Appropriate NIOSH-approved respiratory protection to avoid inhalation of mist or vapors which may be present under hot temperature conditions.

# APPENDIX A

# TANK ULLAGE/FUELING LOG AND FUEL UNLOADING PROCEDURES CHECKLIST

**APPENDIX A-1**

**TANK ULLAGE AND FUELING LOG**

**Station Name: _____ Tank Capacity: _____ gallons**

| Date | Initials | Gauge Reading | Initial Volume of Fuel in Tank [a] (Gallons) | Available Capacity or Ullage [b] (Gallons) | Quantity Added (Gallons) | Comments |
|---|---|---|---|---|---|---|
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Notes:

a. From gage reading

b. Available capacity = tank capacity - initial volume of fuel in tank

## APPENDIX A-2

## FUEL UNLOADING PROCEDURE CHECKLIST

**Date:** _____ **Tank:** _____

**NWS Representative:** _____ **Supplier:** _____

| √ | ITEM | DESCRIPTION | COMMENTS |
|---|---|---|---|
| **The following six items must be completed <u>prior</u> to fuel unloading:** | | | |
| | 1 | Move spill containment equipment, such as booms or spill barriers, into the unloading area. | |
| | 2 | Ensure the audible high-level alarm system and automatic shutoff valve are functioning properly (if applicable). | |
| | 3 | Determine the available capacity (ullage) of the tank by converting the reading on the fuel gauge to gallons (see Appendix A-1). The ullage should then be marked in the fueling log and communicated to the tank truck unloading contractor. | |
| | 4 | Block the wheels of the tank truck. | |
| | 5 | Place drip pans under all pump hose fittings (if applicable) after the hose is hooked up to the tank and before unloading. | |
| | 6 | Ensure the fill nozzle is placed in the appropriate tank appurtenance. | |
| **During unloading** | | | |
| | 7 | Ensure that the NWS representative and the tank truck operator remain with the vehicle at all times during unloading. | |
| | 8 | Monitor the gauges on the tank and the truck continuously to ensure the ullage is not exceeded. | |
| **After fuel unloading is completed** | | | |
| | 9 | Record the amount of fuel unloaded in the log (Appendix A-1). | |
| | 10 | Before removing the fill hose from the tank, ensure that it is drained and that all drain valves are closed (if applicable). | |
| | 11 | Any fuel accumulated in the drip pans or spill container on the fill pipe should be poured into the tank (if it has the capacity) or disposed of appropriately (describe how it was disposed of, if applicable). | |
| | 12 | Inspect the tank truck before removing the blocks to ensure the lines have been disconnected from the tank. | |
| | 13 | Remove the blocks from the tank truck wheels. | |
| | 14 | Place a copy of this fuel unloading procedure checklist in the Best Management Plan. | |

# APPENDIX B

# TANK INSPECTION CHECKLIST

| MONTHLY INSPECTION CHECKLIST | | | |
|---|---|---|---|
| **Date of Inspection:** | **Tank Name or No.:** | | |
| **Date of Last Inspection:** | **Inspected by:** | **Signature:** | |
| **A. TANKS** | **YES** | **NO** | **NOTES** |
| 1. Are tanks marked properly? | | | |
| 2. Is area atop and around tank and within berm free of combustible materials and debris? stains? | | | |
| 3. Is there any oil on the ground, concrete, or asphalt around the tank? | | | |
| 4. Are there any visible cracks or indications of corrosion on the tank, at fittings, joints, or seals (such as paint peeling or rust spots)? | | | |
| 5. Are there any raised spots, dents, or cracks on the tank? | | | |
| 6. Does it appear that the foundation has shifted or settled? | | | |
| 7. Is the fuel gauge working properly? | | | |
| 8. Are all vents clear so they may properly operate? | | | |
| 9. If rainwater is present within containment, does capacity remain for spill control, if applicable? | | | |
| **B. PIPING** | | | |
| 1. Is there any oil on the outside of or under any aboveground piping, hoses, fittings, or valves? | | | |
| 2. Are aboveground piping, hoses, fittings, or valves in good working condition? | | | |
| **C. SECURITY/SAFETY/SPILL COUNTERMEASURES** | | | |
| 1. Are lights working properly to detect a spill at night? | | | |
| 2. Are all locks in the "lock" position? | | | |
| 3. Are all warning signs properly posted and readable? | | | |
| 4. Are vehicle guard posts in place and properly secured (if applicable)? | | | |
| 5. Are spill kits easily accessible, protected from the weather, complete, and replenished if necessary? | | | |
| **Corrective Actions Required:** | | | |

| ANNUAL INSPECTION CHECKLIST (Page 1 of 1) | | | | |
|---|---|---|---|---|
| **Date of Inspection:** | **Tank Name or No.:** | | | |
| **Date of Last Inspection:** | **Inspected by:** | | | |
| | **Signature:** | | | |
| **A.** | **MONTHLY CHECKLIST** | **YES** | **NO** | **NOTES** |
| 1. | Have monthly inspection checklists been completed? | | | |
| **B.** | **TANKS** | | | |
| 1. | Are all alarms and automatic shutoff devices working properly? | | | |
| 2. | Is interstitial monitor functioning properly (if applicable)? | | | |
| **C.** | **OTHER** | | | |
| 1. | | | | |
| **Corrective Actions Required:** | | | | |

# APPENDIX C

# SPILL REPORTING

## APPENDIX C

## SPILL REPORTING

**1. GENERAL**

| | |
|---|---|
| Name of Facility: | Address: |
| Completed By: | Organization: |
| Position: | Phone: |

**2. SPILL INFORMATION**

| | |
|---|---|
| Date: | Time: |
| Location at Facility: | Quantity: |
| Substance Spilled: | Other: |

**3. OUTSIDE NOTIFICATIONS: ( Insert telephone numbers)**

| Agencies | Record the external regulatory agency representative name when making the calls. | Date & Time |
|---|---|---|
| Call **911** for emergency assistance | | |
| Regional Management (see Part III Section B subparagraph 1.b) (801) 524-5138 Ext.223 | | |
| Line Office Environmental Compliance Officer (see Part III Sectin B subparagraph 1b) (301) 713-1838 Ext 165 or Ext 173 | | |
| **NOAA, RECO** (see Part III Section B subparagraph 1.c) (205) 526-6647 | | |
| EPA National Response Center or U.S. Coast Guard : (800) 424-8802 | | |
| State of Montana Disaster and Emergency Services Division Phone (406) 841-3911 | | |
| **LECO** — City of Billings Fire Department Phone 911 | | |

**4. INFORMATION ON SOURCE AND CAUSE**

**5. DESCRIPTION OF ENVIRONMENTAL DAMAGE**

**6. CLEANUP ACTION(S) TAKEN**

**7. CORRECTIVE ACTION(S) TO PREVENT FUTURE SPILLS**

Note: All information must be filled in. If something is unknown, write “unknown”.
Copies must be sent, preferably by e-mail, to the NWS/NOAA personnel listed above.

# APPENDIX D

# TRAINING OUTLINE & TRAINING RECORD

# APPENDIX D-1
# TRAINING OUTLINE: SPILL PREVENTION, CONTROL AND COUNTERMEASURES

Training will be provided for facility personnel at the following times:

1. System startup or whenever new equipment is installed
2. Within the first week of employment for new personnel
3. Annually

The training will include complete instruction in the elements of the facility's Spill Prevention, Control, and Countermeasure plan and will include the following:

1. Pollution control laws, rules, and regulations including a summary of Title 40 of the Code of Federal Regulations Part 112 "Oil Pollution Prevention" (see Attachment)

2. Fuel Storage System

   A. Purpose and application of the following system elements:

      1. Tanks
      2. Piping
      3. Pumps
      4. Accessory equipment
      5. Electronic monitors

   B. Operation, maintenance, and inspection of system elements

3. Spill Prevention

   A. Potential spill sources
   B. Spill flow direction and impact on navigable waters
   C. Procedures to prevent spills, especially during fuel unloading

4. Spill Control

   A. Secondary containment
   B. Safety valves
   C. Pump and equipment shutoff switches
   D. Use of catch basin inlet covers or other diversionary devices

5. Spill Countermeasures

   A. Location and use of emergency phone numbers
   B. Location and use of fire extinguishers
   C. Location and use of spill cleanup kit
   D. Stopping the leak

# APPENDIX D-2

## TRAINING REPORT FORM

| DATE OF TRAINING | EMPLOYEE TRAINED | TRAINER | REMARKS |
|---|---|---|---|
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# APPENDIX E

# MATERIALS SAFETY DATA SHEET ATTACHMENT

# APPENDIX F

# SPILL CLEANUP KIT INFORMATION ATTACHMENT

# APPENDIX G

# FUEL TANK DATA AND INFORMATION

# APPENDIX H

# PERMITS

# APPENDIX I

# PHOTOGRAPHS OF FACILITY TANKS AND PIPING

## APPENDIX J (MAPS & DRAWINGS)